

**Amendment to the Abstract:**

The Abstract has been amended. A revised Abstract is attached.

**ABSTRACT**

~~This invention is realized in such a way as to output a~~ A rectangular wave or a waveform similar to it ~~the rectangular wave is output~~ with an conductive angle no less than  $120^\circ$  but no more than  $150^\circ$  during low-speed operation, but output a rectangular wave, a sine wave or a waveform similar to them with an conductive angle no less than  $130^\circ$  but under  $180^\circ$  by changing the frequency only while maintaining the PWM duty constant at high-speed operation, making it possible to realize high-efficiency & ~~and~~ low-noise operation at low-speed operation, secure stable high speed, and prevent peak current of effective current because the current waveform also comes closer to sine wave.